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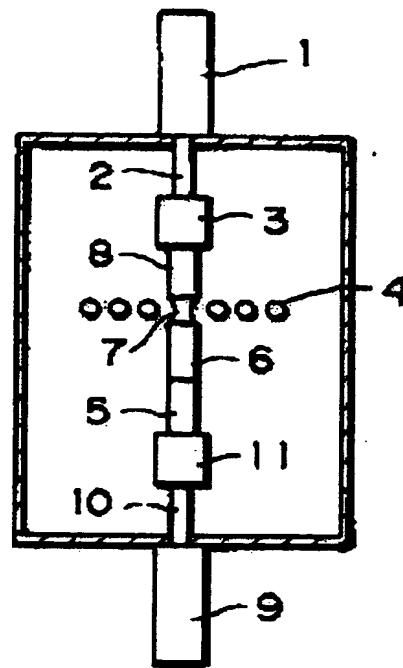
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(54) BORIDE SINGLE CRYSTAL, SUBSTRATE FOR FORMING SEMICONDUCTOR, AND ITS MANUFACTURING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a good diboride substrate having no crack and no grain boundary, and necessary for forming a thin film.

SOLUTION: The single crystal of ZrB_2 or TiB_2 is manufactured by crystallizing a raw material rod prepared by mixing a Y ingredient and a boride of an alkaline earth metal into ZrB_2 or TiB_2 , by high frequency floating zone method. By this method the single crystal having no crack, and having substantially no grain boundary, is obtained. The single crystal is sliced in a disk, and its surface is polished into the substrate and used as the substrate for forming the semiconductor thin film.



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